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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/601,353  
Filing Date: June 23, 2003  
Appellant(s): PAPANYAN ET AL.

**MAILED**

**OCT 24 2007**

**Technology Center 2100**

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Gary W. Hamilton  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 7/25/2007 appealing from the Office action mailed 11/21/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,990,526	Zhu	5-2000
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**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4-6, 8, 11-14, 15, and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhu ("Zhu" US Patent 6,990,526; filed 5/22/2001, claims priority from Provisional Application 60/205/913 filed 5/22/2000)

**As per claim 1, Zhu** teaches "A method for delivering a web page to a client, comprising:" (see Abstract)

“receiving a request from a client for a web page;” (column 4 lines 19-24, wherein a client sends a request for a web page accepted by a cache module)

“generating a query from a web server to a database server,” (column 3 line 60 – column 4 line 7, wherein a client gateway consisting of a cache module send a query to a data gateway consisting of a management module) “said database server comprising a plurality of data tables and a web page cache tables;” (Figure 2A references 218, 214 and column 5 lines 37-48, wherein a management module maintains a log table and a signature table used for updating cache data)

“using said database server to detect execution of database triggers for updating status flags in said web page cache table;” (column 6 lines 33-67, wherein the coherency management module contains a decision process to monitor activity, detecting when activity decisions are met and an update interval is indicated).

“examining a flag in a data field in said web page cache table corresponding to said requested web page to determine if the most current version of said requested web page is stored on said web;” (figure 4 and column 6 line 62 – column 7 line 12, wherein the signature table in a data gateway is examined using a status bit to see if a page is current or stale)

“and returning the most current version of the web page to the client.” (column 4 lines 24-27, wherein the cache module in the client gateway returns a current web page to a client)

**As per claim 4, Zhu** teaches “returning the version of said web page stored on said web server to the client if the examination of said flag in said data field indicates

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that the version of the web page stored on said web server is the most current version of said requested web page.” (column 6 lines 1-5, wherein a page is provided to the client from cache if it is current and not stale)

**As per claim 5, Zhu** teaches “generating an updated version of said requested web page if the examination of said flag in said data field indicates that the version of the web page stored on said web server is not the most current version of said requested web page,” (column 4 lines 27-37, wherein a request for an updated copy of the web page is made when an update message is received if the page is indicated to be stale) “and returning said updated version of said requested web page to said client.” (column 4 lines 19-27, wherein an updated page from the cache module is sent to the client)

**As per claim 6, Zhu** teaches “caching said updated version of said requested web page.” (column 7 lines 33-39, wherein the updated web page is received and stored in cache memory)

**As per claim 8, Zhu** teaches “A system for delivering a web page to a client, comprising:” (see Abstract)

“a web server having a plurality of cached web pages stored therein, said web server being operable to receive a request from a client for a web page and to communicate with said database server to determine if a current version of said requested web page is within said plurality of cached web pages stored in said web server,” (column 3 line 60 – column 4 line 7, wherein a client gateway consisting of a

cache module receives a page request from a client and sends a query to a data gateway consisting of a management module) said web server further being operable to transmit said requested web page to said client upon an affirmative determination that the corresponding web page stored on said web server is the current version of said requested web page;" (column 4 lines 19-27, wherein an updated page from the cache module is sent to the client)

"a database server comprising a plurality of data tables and a web page cache table," (Figure 2A references 218, 214 and column 5 lines 37-48, wherein a management module maintains a log table and a signature table used for updating cache data) "said database server being operable to examine a flag in a data field in said web page cache table corresponding to said requested web page to determine if the most current version of said requested web page is stored on said web server," (figure 4 and column 6 line 62 – column 7 line 12, wherein the signature table in a data gateway is examined using a status bit to see if a page is current or stale)

"wherein said database server is operable to detect the execution of a database trigger and, in response to detection of execution of said database trigger, is further operable to set said flag to a value indicating that the version of the web page stored on said web server is not the most current version of said requested web page." (column 3 lines 36-48, and column 6 lines 33-67 wherein the coherency management module in the data gateway sets a stale bit for an associated web page indicating it is not the most current version available and a decision process detects when an update interval is indicated)

**As per claim 12, Zhu** teaches “said web server is operable to transmit the version of said web page stored on said web server to the client if the examination of said flag in said data field indicates that the version of the web page stored on said web server is the most current version of said requested web page.” (column 6 lines 1-5, wherein a page is provided to the client from cache if it is current and not stale)

**As per claim 13, Zhu** teaches “generate an updated version of said requested web page if the examination of said flag in said data field indicates that the version of the web page stored on said web server is not the most current version of said requested web page;” (column 4 lines 27-37, wherein a request for an updated copy of the web page is made when an update message is received if the page is indicated to be stale) “and transmit said updated version of said requested web page to said client.” (column 4 lines 19-27, wherein an updated page from the cache module is sent to the client)

**As per claim 14, Zhu** teaches “said database server is operable to update said web page cache table to set said flag to a value indicating that the version of the requested web page stored on said web server is the most current version of said requested web page.” (column 7 lines 7-12, wherein the status bit is updated to indicate “current” in the signature cache table)

**As per claim 15, Zhu** teaches “An information handling system comprising a system for delivering a web page to a client, comprising:” (see Abstract)



“a plurality of data processing components operable to process data corresponding to a web page” (Figure 1 references 110, 120, 140, 160, 130, 132, 150, 152, 170, 172 and Figure 2A)

“wherein said information handling system is operable to communicate with:”  
(see Abstract)

“a web server having a plurality of cached web pages stored therein, said web server being operable to receive a request from a client for a web page and to communicate with said database server to determine if a current version of said requested web page is within said plurality of cached web pages stored in said web server,” (column 3 line 60 – column 4 line 7, wherein a client gateway consisting of a cache module receives a page request from a client and sends a query to a data gateway consisting of a management module) said web server further being operable to transmit said requested web page to said client upon an affirmative determination that the corresponding web page stored on said web server is the current version of said requested web page;” (column 4 lines 19-27, wherein an updated page from the cache module is sent to the client)

“a database server comprising a plurality of data tables and a web page cache table,” (Figure 2A references 218, 214 and column 5 lines 37-48, wherein a management module maintains a log table and a signature table used for updating cache data) “said database server being operable to examine a flag in a data field in said web page cache table corresponding to said requested web page to determine if the most current version of said requested web page is stored on said web server,”

(figure 4 and column 6 line 62 – column 7 line 12, wherein the signature table in a data gateway is examined using a status bit to see if a page is current or stale)

“wherein said database server is operable to detect the execution of a database trigger and, in response to detection of execution of said database trigger, is further operable to set said flag to a value indicating that the version of the web page stored on said web server is not the most current version of said requested web page.” (column 3 lines 36-48, and column 6 lines 33-67 wherein the coherency management module in the data gateway sets a stale bit for an associated web page indicating it is not the most current version available and a decision process detects when an update interval is indicated)

**As per claim 19, Zhu** teaches “said web server is operable to transmit the version of said web page stored on said web server to the client if the examination of said flag in said data field indicates that the version of the web page stored on said web server is the most current version of said requested web page.” (column 6 lines 1-5, wherein a page is provided to the client from cache if it is current and not stale)

**As per claim 20, Zhu** teaches “generate an updated version of said requested web page if the examination of said flag in said data field indicates that the version of the web page stored on said web server is not the most current version of said requested web page;” (column 4 lines 27-37, wherein a request for an updated copy of the web page is made when an update message is received if the page is indicated to be stale) “and transmit said updated version of said requested web page to said client.”

(column 4 lines 19-27, wherein an updated page from the cache module is sent to the client)

As per claim 21, Zhu teaches "said database server is operable to update said web page cache table to set said flag to a value indicating that the version of the requested web page stored on said web server is the most current version of said requested web page." (column 7 lines 7-12, wherein the status bit is updated to indicate "current" in the signature cache table)

#### **(10) Response to Argument**

With respect to the outstanding 35 U.S.C. 102(e) rejections relating to all the independent claims, and the remaining claims which depend therefrom, Applicants argue that Zhu (US Patent 6,990,526 B1) does not teach "a database server that is operable to detect the execution of a database trigger" because the "decision process" as taught by Zhu in column 6 lines 33-67 is not the same thing as detecting the execution of a database trigger.

The examiner respectfully disagrees with appellant's arguments. The examiner respectfully submits that Zhu illustrates in Figure 4 the decision process to monitor activity, which detects when activity decisions are met and an update interval is indicated. As disclosed in the previous limitation, Zhu, in column 5 lines 37-48, contains a signature table to be used for updating cache data. As disclosed in the Abstract of Zhu:

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The coherency management module caches these signatures and the corresponding URL and uses the signatures to determine when a page has been updated. When, on the basis of signature comparisons it is determined that a page has been updated the coherency management module sends a notification to all complementary cache modules.

As outlined, signatures are used to determine when an update is necessary, as disclosed in Figure 4 and in more detail in column 6 lines 33-67.

In the interpretation of the Examiner, the signatures are statements that can be read and processed in updating a web page. There is in Zhu a coherency management module that assures that a user receives the most up-to-date version of a web page. To accomplish this, the steps in Figure 4 are accomplished. Particularly, a request for a web page is made to the coherency management module (column 6 lines 1-3, 33-37). Once this request is processed, a signature is generated for the requested web page to be used to determine the status of the web page, in terms of requiring an update or not.

When the next packet is received control passes to process 404 in which the source and destination URLs are recorded in the log table for those requests coming via a client gateway. Then in process 406 a signature is generated for the requested web page. Next in process 408 a search is conducted by the signature cache controller 220 (See FIG. 2A) to determine whether a prior signature for the web page exists. (column 6 lines 37-44)

In the process, the generation of a signature is completed and moves on to the steps of determining whether a status bit is set to indicate whether a web page is stale, in terms of there being a more up-to-date version of a page.

Zhu, in Figure 2C, column 4 lines 64-67, and column 5 lines 8-11, disclose a signature as an identifier produced by a signature generator. It is a statement that identifies a web page version, and is analyzed to determine the status bit associated

with a web page, wherein the status bit is interpreted as the updating status flag of the present invention.

In page 5 of the Appeal Brief filed July 25, 2007, the appellant argues that "the database trigger is a 'stored procedure' that is invoked automatically when a predefined event occurs". Yet, Figure 1 of the present application shows a "stored procedure" (reference 116) and "triggers" (reference 118) being separate and communicating with the tables (reference 110) in a database server. Therefore, the interpretation of triggers given by the Examiner is based on paragraph 0018 of the instant application, wherein a trigger is a statement that is executed when a specific operation occurs. In Zhu's invention, the detection of a request for a web page triggers the generation of a signature, which is then used to update the status bit of a web page.

As shown in Figure 2A of Zhu and column 5 lines 12-21, there is a signature table (reference 218) that communicates with a signature generator upon creation of signatures, which then can change the status bit associated with a web page to indicate it is out of date, as shown below:

The signature generator passes the signature and the corresponding URL to the cache controller 220 which stores them in signature table 218 shown in detail in FIG. 2C. When successive signatures for the same web page, identified by the same URL differ the cache controller loads the new signature into the associated row of the signature table and changes a status bit associated with the web page to indicate associated web page is stale or out of date.

This process is interpreted by the Examiner as detection of database triggers to update status flags in a web page cache table, for the purpose of providing the client with the most current version of a web page.

Conclusion:

It is respectfully submitted that the reference cited discloses the claimed database server to detect execution of database triggers for updating status flags in said web page cache table. In light of the forgoing arguments, the examiner respectfully requests the honorable board of Appeals and Interferences to sustain the rejection.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Respectfully submitted,

/Dangelino Gortayo/

Dangelino Gortayo, Assistant Examiner, AU 2168

May 21, 2007

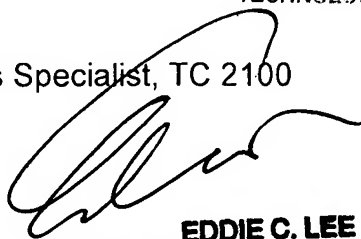
Conferees:

Tim Vo, SPE AU 2168

Eddie Le, TQAS/Appeals Specialist, TC 2100



TIM VO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100



EDDIE C. LEE  
SUPERVISORY PATENT EXAMINER